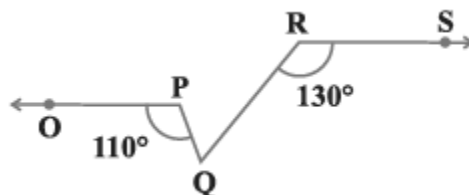


PM SHRI Kendriya Vidyalaya Khurda Road
Class 9 Autumn Break Assignment 2025 Mathematics

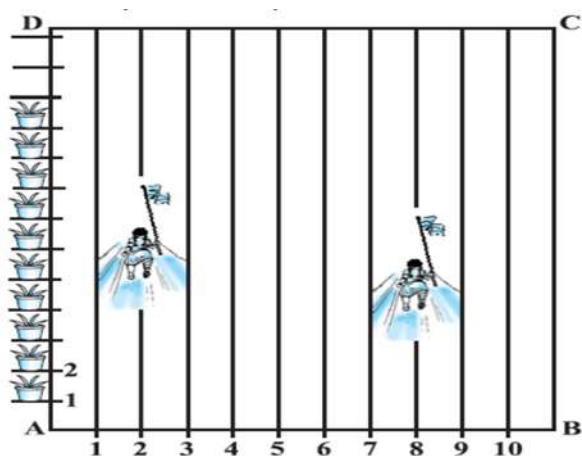
MCQ

1. If $\Delta ABC \cong \Delta PQR$ and ΔABC is not congruent to ΔRPQ , then which of the following is not true:
(A) $BC = PQ$ (B) $AC = PR$ (C) $QR = BC$ (D) $AB = PQ$
2. Which of the following is not a criterion for congruence of triangles?
(A) SAS (B) ASA (C) SSA (D) SSS
3. In ΔABC , $BC = AB$ and $\angle B = 80^\circ$. Then $\angle A$ is equal to
(A) 80° (B) 40° (C) 50° (D) 100°
4. It is given that $\Delta ABC \cong \Delta FDE$ and $AB = 5$ cm, $\angle B = 40^\circ$ and $\angle A = 80^\circ$. Then which of the following is true?
(A) $DF = 5$ cm, $\angle F = 60^\circ$ (B) $DF = 5$ cm, $\angle E = 60^\circ$
(C) $DE = 5$ cm, $\angle E = 60^\circ$ (D) $DE = 5$ cm, $\angle D = 40^\circ$
5. On plotting the points O (0, 0), A (3, 0), B (3, 4), C (0, 4) and joining OA, AB, BC and CO which of the following figure is obtained?
(A) Square (B) Rectangle (C) Trapezium (D) Rhombus
6. If the coordinates of the two points are P (-2, 3) and Q (-3, 5), then (abscissa of P) - (abscissa of Q) is
(A) - 5 (B) 1 (C) -1 (D) - 2
7. The perpendicular distance of the point P (3, 4) from the y-axis is
(A) 3 (B) 4 (C) 5 (D) 7
8. If two interior angles on the same side of a transversal intersecting two parallel lines are in the ratio 2 : 3, then the greater of the two angles is
(A) 54° (B) 108° (C) 120° (D) 136°
9. The angles of a triangle are in the ratio 5 : 3 : 7. The triangle is
(A) an acute angled triangle (B) an obtuse angled triangle
(C) a right triangle (D) an isosceles triangle
10. In the figure, if $OP \parallel RS$, $\angle OPQ = 110^\circ$ and $\angle QRS = 130^\circ$, then $\angle PQR$ is equal to
(A) 60° (B) 40° (C) 50° (D) 70°



SA & LA Type Questions

1. Rationalise: $\frac{1}{\sqrt{7}+\sqrt{3}-\sqrt{2}}$
2. If $= \frac{3+\sqrt{5}}{2}$, then find the value of $a^2 + \frac{1}{a^2}$.
3. Using Factor theorem factorise: $x^3 - 23x^2 + 142x - 120$
4. Verify that: $x^3 + y^3 + z^3 - 3xyz = \frac{1}{2}(x+y+z)[(x-y)^2 + (y-z)^2 + (z-x)^2]$
5. Name the quadrant in which the following points lie: (i) A(2, 9) (ii) B(-3, 5) (iii) C(-4, -7) (iv) D(3, -2)
6. Find the angle whose complement is one third of its supplement.
7. To conduct Sports Day activities, in your rectangular shaped school ground ABCD, lines have been drawn with chalk powder at a distance of 1m each. 100 flower pots have been placed at a distance of 1m from each other along AD, as shown,



- (i) Karan/ Kavya running in 8th lane puts his/her flag in front of 5th pot, write the coordinate of his/her position.
- (ii) Write the abscissa of the position of girl running in lane 2.
- (iii) Disha running in lane 10 has kept her flag in front of 13th pot and she is 5m ahead of Sam. Sam is running in lane 7. Write the coordinate where Sam placed his flag.
- (iv) What is the mirror image of the co- ordinate (-10,2) with respect to x- axis.
- (v) Jeeva / Jayant running in 7th lane and keep her/his flag on 70th flower pot. Write the ordinate of this position.

Complete the Portfolio

HOLIDAY HOMEWORK (AUTUMN BREAK)

Class – IX (Science)

I. Make a project for science exhibition as per the topics given below

1. Sustainable Agriculture
2. Waste management and alternatives to plastics
3. Green Energy
4. Emerging Technologies
5. Recreational Mathematical Modeling
6. Health and Hygiene
7. Water conservation and management

II. Complete all the exercises of NCERT text book in your note book.

III. Complete and submit the portfolio on “Management of Natural Resources”.

IV.. Write down the following practicals in your Practical record.

1. Preparation of:

- a) a true solution of common salt, sugar and alum
- b) a suspension of soil, chalk powder and fine sand in water
- c) a colloidal solution of starch in water and egg albumin/milk in water and distinguish between these on the basis of transparency • filtration criterion • stability •

2. Preparation of

- a) A mixture
- b) A compound using iron filings and sulphur powder and distinguishing between these on the basis of: (i) appearance, i.e., homogeneity and heterogeneity (ii) behaviour towards a magnet (iii) behaviour towards carbon disulphide as a solvent (iv) effect of heat

3. Perform the following reactions and classify them as physical or chemical changes:

- a) Iron with copper sulphate solution in water
- b) Burning of magnesium ribbon in air
- c) Zinc with dilute sulphuric acid
- d) Heating of copper sulphate crystals
- e) Sodium sulphate with barium chloride in the form of their solutions in water

4. Preparation of stained temporary mounts of

- (a) onion peel,
- (b) human cheek cells & to record observations and draw their labeled diagrams.

5. Identification of Parenchyma, Collenchyma and Sclerenchyma tissues in plants, striped, smooth and cardiac muscle fibers and nerve cells in animals, from prepared slides. Draw their labeled diagrams.

PM SHRI KENDRIYA VIDYALAYA KHURDA ROAD
HOLIDAY HOMEWORK FOR AUTUMN BREAK 2025
CLASS – IXTH SECTION- C

Answer the following questions.

- 1.Explain the February Revolution in Russia.**
- 2.Briefly explain the October revolution in Russia**
- 3.How did the Industrial workers are divided in Russia.**
- 4.What do you mean by Bloody Sunday. Explain it.**
- 5.Write a short note about Summer and Winter season in India.**
- 6.Why Monsoon India is called as a unifying Bond ?**
- 7.What do you mean by election manifesto? Explain with examples.**
- 8.Explain the power and functions of Election Commission.**
- 9.Why election is needed for a Democratic country?**
- 10.Explain the major challenges in the Election in India.**
- 11.What is model code of conduct in election? Explain.**
- 12Explain briefly about Reserve constituency.**
- 13.Describe about Nazi propaganda in Germany.**
- 14.Individual project about Disaster Management at village level, block level, district level, state level and national level in India.**

PM SHRI KENDRIYA VIDYALAYA KHURDA ROAD
HOLIDAY HOMEWORK FOR AUTUMN BREAK 2025
CLASS – XTH SECTION- A ,B & C

Answer the following question

- 1.What are the major disadvantages in Barter system.**
- 2.Explain different type of deposits.**
- 3.Write the functions of money.**
- 4.What is SHG? Explain briefly.**
- 5.What do you mean by credit? Explain it in your own words.**
- 6.Explain the functions of political party.**
- 7.What do you mean by Political Party system?**
- 8.Why civil disobedience movement was failed?**
- 9.Explain the classification of Industries.**
- 10.What is Industrial pollution? Explain it in your own words.**
- 11.Individual project on consumer awareness, sustainable development, or in CBSE curriculum(Any one)**



पीएम श्री केन्द्रीय विद्यालय खुर्दा रोड

शरदकालीन अवकाशीय गृहकार्य
कक्षा-10



दिन 1 — पाठ-पठनीयता व शब्दावली (क्षितिज — गद्य/कविता)

कार्य: क्षितिज की किसी गद्य अनुच्छेद/कविता का सावधानीपूर्वक पढ़ें → उसका 150 शब्दों में संक्षेप लिखें + पाठ में से 5 नए शब्द चुनकर अर्थ व वाक्य बनाइए।

लक्षित दक्षताएँ: सम्यक पढ़ना, सार-चित्रण, शब्द-समृद्धि।

आउटपुट: 150 शब्द सार + 5 शब्द (अर्थ+वाक्य)।

दिन 2 — नाट्य रूपांतरण (कृतिका — कहानी)

कार्य: कृतिका की कोई छोटी कहानी चुनें → उसकी 3-5 मिनट की नाट्य-भूमिका (script) लिखें और घर पर किसी सदस्य/साथी के साथ रिकॉर्ड/प्रदर्शित करें।

लक्षित दक्षताएँ: समझ एनालिसिस, संवाद-लेखन, मौखिक अभिव्यक्ति।

आउटपुट: स्क्रिप्ट (एक पृष्ठ) + वीडियो/ऑडियो क्लिप या क्लास में प्रदर्शन।

दिन 3 — कविता का विश्लेषण और सृजन (क्षितिज — कविता)

कार्य: क्षितिज की एक कविता के प्रत्येक पद/अंतरा में प्रयुक्त मुख्य भाव/रूपक चिह्नित कर लिखें (10-12 पंक्तियों का विश्लेषण), फिर उसी भाव पर 4-8 पंक्तियों की अपनी कविता रचना करें।

लक्षित दक्षताएँ: साहित्यिक तत्व पहचान, रचनात्मक लेखन।

आउटपुट: विश्लेषण + अपनी कविता।

दिन 4 — औपचारिक पत्र लेखन (पाठ-संदर्भ आधारित)

कार्य: पाठ में आए किसी सामाजिक/शैक्षिक मुद्दे पर समाचार-पत्र के संपादक को औपचारिक पत्र लिखें (120-150 शब्द)। उदाहरण: विद्यालय की स्वच्छता, पाठ्यपुस्तक का महत्व।

लक्षित दक्षताएँ: औपचारिक लेखन, विचार-संगठना।

आउटपुट: एक औपचारिक पत्र।

दिन 5 — कथा-लेखन (रचनात्मक)

कार्य: क्षितिज/कृतिका के किसी पात्र या घटना से प्रेरित होकर 300 शब्दों की लघु कहानी लिखें — शुरुआत, मध्य, अंत स्पष्ट हो; संवाद जोड़ें।

लक्षित दक्षताएँ: सृजनात्मक सोच, अनुच्छेद-निर्माण, संवाद।

आउटपुट: 300 शब्द कहानी।

दिन 6 — मौखिक अभिव्यक्ति: भाषण/प्रस्तुति

कार्य: “मेरे प्रिय पाठ/प्रेरणा स्रोत” पर 2–3 मिनट का भाषण तैयार करें और रिकॉर्ड करें; कक्षा में/ऑनलाइन साथी को सुनाएँ। भाषण में पाठ से उद्धरण जोड़ें।

लक्षित दक्षताएँ: वाणी कौशल, आत्मविश्वास, उद्धरण प्रयोग।

आउटपुट: ऑडियो/वीडियो फ़ाइल या क्लास प्रस्तुति।

दिन 7 — भाषा कौशल: व्याकरण और शब्द-चयन (पाठ्यांश आधारित)

कार्य: क्षितिज/कृतिका के दिए गए एक पाठ्यांश से 10 वाक्य चुनकर उनमें से क्रियाओं/विशेषणों/संज्ञाओं की पहचान, तथा 5 वाक्यों को सक्रिय से निष्क्रिय या प्रत्यक्ष से अप्रत्यक्ष में रूपांतरित कीजिए।

लक्षित दक्षताएँ: व्याकरणिक ज्ञान, भाषिक सटीकता।

आउटपुट: पहचान तालिका + रूपांतरण वाक्य।

दिन 8 — सामाजिक चेतना: पोस्टर/PSA (कृतिका प्रेरित)

कार्य: पाठ में उठे किसी सामाजिक विषय (पर्यावरण, बाल-शिक्षा, सहानुभूति आदि) पर अभियान-पोस्टर बनाइए + 40–50 शब्द का नारा/कैप्शन। डिजिटल विकल्प: 30–45 सेकेंड का PSA वीडियो बनाएं।

लक्षित दक्षताएँ: रचनात्मक प्रस्तुति, संदेश-संलिप्तता, नागरिक जागरूकता।

आउटपुट: पोस्टर (फोटो) या वीडियो।

दिन 9 — आलोचनात्मक समीक्षा (कृतिका/क्षितिज से)

कार्य: किसी पाठ/कहानी/कविता का 200 शब्दों में आलोचनात्मक समीक्षा लिखें — विषय, संदेश, मजबूत व कमजोर पक्ष, व्यक्तिगत दृष्टिकोण।

लक्षित दक्षताएँ: आलोचनात्मक सोच, तर्कशीलता, साहित्यिक मूल्यांकन।

आउटपुट: 200 शब्द समीक्षा।

दिन 10 — पोर्टफोलियो तथा आत्म-प्रतिबिंब

कार्य: पिछले 9 दिनों के सभी कार्यों का संग्रह (Portfolio) बनाइए + 200 शब्दों का स्व-प्रतिबिंब लिखिए: किस कार्य से क्या सीखा, किसमें सुधार चाहिए, आगे के लिए तीन भाषा-लक्ष्य तय करें। शिक्षक के लिए स्व-आकलन (self-score) दें।

लक्षित दक्षताएँ: metacognition (स्व-चिन्तन), आत्म-सुधार, दस्तावेजीकरण।

आउटपुट: पोर्टफोलियो फाइल/फोल्डर + आत्म-प्रतिबिंब + स्व-आकलन।

जय हिंद : जय हिंदी

PM SHRI Kendriya Vidyalaya Khurda Road
Class 10 Autumn Break Assignment 2025 Mathematics

1. Solve two CBSE sample papers for 2026 (both Mathematics Standard & Mathematics Basic) links of which is provided herein below.

https://cbseacademic.nic.in/web_material/SQP/ClassX_2025_26/MathsStandard-SQP.pdf

https://cbseacademic.nic.in/web_material/SQP/ClassX_2025_26/MathsBasic-SQP.pdf

Complete the Portfolio

HOLIDAY HOMEWORK (AUTUMN BREAK)

Class – X (Science)

I. Make a project for science exhibition as per the topics given below

1. Sustainable Agriculture
2. Waste management and alternatives to plastics
3. Green Energy
4. Emerging Technologies
5. Recreational Mathematical Modeling
6. Health and Hygiene
7. Water conservation and management

I. Complete all the exercises of NCERT text book in your note book.

II. Complete and submit the portfolio on “Management of Natural Resources”.

IV. Write down the following practicals in Practical record.

1. A. Finding the pH of the following samples by using pH paper/universal indicator:

- (i) Dilute Hydrochloric Acid (ii) Dilute NaOH solution (iii) Dilute Ethanoic Acid solution
(iv) Lemon juice (v) Water (vi) Dilute Hydrogen Carbonate solution

B. Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with:

- a) Litmus solution (Blue/Red) b) Zinc metal c) Solid sodium carbonate

2. Performing and observing the following reactions and classifying them into:

- A. Combination reaction B. Decomposition reaction
C. Displacement reaction D. Double displacement reaction

(i) Action of water on quicklime

(ii) Action of heat on ferrous sulphate crystals

(iii) Iron nails kept in copper sulphate solution

(iv) Reaction between sodium sulphate and barium chloride solutions

3. Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions:

- i) $\text{ZnSO}_4(\text{aq})$ ii) $\text{FeSO}_4(\text{aq})$ iii) $\text{CuSO}_4(\text{aq})$ iv) $\text{Al}_2(\text{SO}_4)_3(\text{aq})$

Arranging Zn, Fe, Cu and Al (metals) in the decreasing order of reactivity based on the above result.

4. Preparing a temporary mount of a leaf peel to show stomata.

5. Experimentally show that carbon dioxide is given out during respiration.

6. Studying (a) binary fission in Amoeba, and (b) budding in yeast and Hydra with the help of prepared slides.

7. Identification of the different parts of an embryo of a dicot seed (Pea, gram or red kidney bean).

Do it in the CW copy.

Chemistry Holiday Homework

1. Prepare summary chart of following chapters
 - (i) Basic concepts of chemistry
 - (ii) structure of atom
 - (iii) Periodic classification and periodicity in properties
 - (iv) Chemical bonding except MOT

Answer the following

2. Give reasons for the following :

- (i) Covalent bonds are directional bonds, while ionic bonds are nondirectional.
- (ii) The water molecule has a bent structure, whereas the carbon dioxide molecule is linear.
- (iii) What is the wavelength of an electron moving at 5.31×10^6 m/sec?

3. Draw the resonating structure of

- (i) Ozone molecule
- (ii) Nitrate ion

4. Why NH_3 has higher dipole moment than NF_3 though both are pyramidal?

5. Calculate mass percentage of glucose.

6. Differentiate between intensive and extensive property.

7. Is the law of thermodynamics applied in air-conditioning systems and how?

8. In both water and dimethyl ether ($\text{CH}_3\text{--O--CH}_3$), oxygen atom is central atom, and has the same hybridization, yet they have different bond angles. Which one has a greater bond angle? Give reason.

9. How would you explain the fact that first ionisation enthalpy of sodium is lower than that of magnesium but its second ionisation enthalpy is higher than that of magnesium?

10. What volume of 10M HCl and 3M HCl should be mixed to obtain 1L of 6M HCl solution?

HOLIDAY HOMEWORK
AUTUMN BREAK -2025

CLASS-XI

SUB: MATHEMATICS

1. COMPELETE ALL THE EXERCISE UPTO PERMUTATION AND COMBINATION FROM NCERT BOOK IN CLASS WORK COPY
2. COMPELETE ALL THE MCQ UPTO PERMUTATION AND COMBINATION FROM NCERT EXAMPLAR BOOK IN CLASS WORK COPY
3. MEMORISE ALL THE TRIGONOMETRY FORMULAES.

10	A body is being raised to a height h from the surface of earth. What is the sign of work done by applied force and gravitational force? (a) Positive, Positive (b) Positive, Negative (c) Negative, Positive (d) Negative, Negative	1
	Choose the correct option as per the statements given in assertion and reason: a) Assertion and Reason both are correct and R is the correct explanation of A. b) Assertion and Reason both are correct but R is not the correct explanation of A. c) Assertion is true but Reason is false. d) Assertion and Reason both are incorrect.	
11	Assertion: Frictional forces are conservative forces. Reason: Potential energy can be associated with frictional forces.	1
12	Assertion: (A) -A spring has potential energy, when it is either compressed or stretched. Reason: (R) -In compressing or stretching a spring, work is done on it against the restoring force.	1
13	Write the correct sentence by choosing the correct option a) When a conservative force does positive work on a body, the potential energy of the body increases / decreases / remains unaltered b) Work done by a body against friction always results in a loss of its kinetic / potential energy. c) The rate of change of total momentum of a many particle system is proportional to the external force / sum of the internal forces on the system d) In an inelastic collision of two bodies the quantities which do not change after the collision are the total kinetic energy / total linear momentum / total energy of the system of two bodies	2
14	A batsman deflects a ball by an angle of 45° without changing its initial speed which is equal to 54 km h^{-1} . What is the impulse imparted to the ball? ($m = 0.15 \text{ kg}$) OR Two bodies of masses 10 kg and 20 kg respectively kept on a smooth, horizontal surface are tied to the ends of a light string. A horizontal force $F = 600 \text{ N}$ is applied to (i) A (ii) B along the direction of string. What is the tension in the string in each case.	2
15	The ceiling of a long hall is 25 m high. What is the maximum horizontal distance that a ball thrown with a speed of 40 m/s can go without hitting the ceiling of the hall?	2
16	(i) Define angle of friction and angle of repose with necessary diagram	3

	(ii) When a person enters a room . In which direction friction will act in between the sole of shoe and floor – outside or inside? And why?	
17	Derive the expression for finding the following in case of a projectile. (i) equation of trajectory. (ii) Time of maximum height (iii) Maximum height of a Projectile (iv) Horizontal Range of a Projectile	5
18	Write any three differences between conservative and non-conservative force.	3
19	(i) Write all the laws of sliding friction (ii) Write the steps used to reduce the effects of friction.	3
20	Using graphical method and proper graph prove the following equations (i) $S = ut + \frac{1}{2}at^2$ (ii) $v^2 - u^2 = 2as$	3
21	According to Hook's law, when a spring is stretched through distance x, the restoring force is set up in the spring due to its elasticity, such that $F \propto x$ or $F = -kx$, where k is a force constant of a spring. Its SI unit is N/m , the work done in stretching the spring through distance x will be $W = \frac{1}{2}kx^2$. This work done is stored as potential energy U of the spring, Therefore, $U = \frac{1}{2}kx^2$ (i) The Dimension of k (a) MLT (b) MLT^{-2} (c) MT^{-2} (d) ML^2T (ii) The spring of force constant 800N/m has an extension of 5 cm. The work done in extending it from 5 cm to 15 cm is- (a) 16J (b) 8J (c) 32J (d) 24J (iii) Two springs of springs constant 1500N/m and 3000N/m are stretched with the same force. Their PE will be in the ratio of (a) 4:1 (b) 2:1 (c) 1:4 (d) 1:2 (iv) If a spring of spring constant k is cut in two equal parts then what will be the new spring constant of each part- (a) k (b) k/2 (c) 2k (d) 1/k	4
22	(i) Identify the law which helps us to find the resultant of two vectors. Derive an expression for the magnitude and direction of the resultant of the two vectors using that law. (ii) A car moving along a straight highway with speed of 126 km h^{-1} is brought to stop within a distance of 200 m. What is the retardation of the car (assumed uniform) and how long does it take for the car to stop?	5
23	(i) Briefly explain the motion of a car on a banked circular track with suitable free body diagram. (ii) A cricket ball of mass 150g has an initial velocity $u = (3\hat{i} + 4\hat{j})\text{ms}^{-1}$ and a final velocity $\vec{v} = -(3\hat{i} + 4\hat{j})\text{ms}^{-1}$ after being hit. The change in momentum is (in kg ms^{-1})	5
24		

25	What is elastic collision? Show that in one dimensional head on elastic collision, the relative velocity of approach is equal to relative velocity of separation. Write the expression of velocities after collisions.	5

KENDRIYA VIDYALAYA SANGATHAN, BHUBNESWAR REGION
HALF YEARLY EXAMINATION 2024-2025

CLASS : XI
MAX. MARKS : 80

SUBJECT:ACCOUNTANCY
TIME:3 HRS.

GENERAL INSTUCTIONS:-

1. This question paper contains 34 questions. All questions are compulsory.
2. Show your workings clearly wherever necessary.
3. All parts of questions should be attempted at one place.

1.	Creditors are the main users of accounting information because they want to know: a. Credit worthiness of the business b. The investment opportunity c. How much tax is paid by the business? d. About the job opportunity	1
2.	Which of the following is not an example of Drawings? a. Withdrew from the bank for personal use. b. Insurance premium paid by the firm. c. Life insurance paid by the firm. d. Home rent of the proprietor paid by the firm.	1
3.	Which of the following transaction will not be recorded in books of accounts? (A) Order received from customer for supply of goods of Rs. 80,000 with advance amount received Rs. 12,000 (B) Purchases a Laptop of Rs. 40,000 for personal use and paying amount from current account of business. (C) Personal car sold for Rs. 82,000 and given that money as advance to suppliers for supply of goods. (D) Conducting interview and selecting Sumit as an accountant on monthly salary of Rs. 42,000	1
4.	Which is an example of business transaction? (A) Profit of the business is computed Rs. 65,000 (B) Closing Stock is valued Rs. 38,000 (C) Payment to Creditors Rs. 52,000 (D) Cash in hand in business is Rs. 69,500	1
5.	Yogesh started a business with capital of Rs. 2,00,000 and raised a loan of Rs. 75,000 from the bank. During the year he had introduced further capital of Rs. 60,000 and he had withdrawn Rs. 36,000 for personal purpose. At the end of the year his assets were Rs. 3,80,000. What will be the profit during the year. (A) Rs. 81,000 (B) Rs. 57,000 (C) Rs. 1,66,000 (D) Rs. 76,000	1
6.	Which is the correct order of the following?	1

	<p>a. (i) Journal (ii) Balance Sheet (iii) Profit and Loss Account (iv) Ledger</p> <p>b. (i) Journal (ii) Ledger (iii) Balance Sheet (iv) Profit and Loss account</p> <p>c. (i) Ledger (ii) Journal (iii) Balance Sheet (iv) Profit and Loss account</p> <p>d. (i) Journal (ii) Ledger (iii) Trial Balance (iv) Profit and loss a/c and Balance Sheet</p>	
7.	<p>On inter-state sale of goods, GST charged is :</p> <p>(a) CGST (b) SGST (c) IGST (d) Both a and b.</p> <p>OR</p> <p>On inter-state sale of goods, which of the following account is credited:</p> <p>(a) Output CGST A/c (b) Output IGST A/c</p> <p>(c) Input IGST A/c (d) Output SGST A/c</p>	1
8.	<p>Mahesh Stationeries Mart sold 50 calculator @ 300 per calculator to Aneja Stationery and sent a invoice and goods. But after receiving the delivery Aneja Stationery find that number of calculators are only 47. Aneja Stationery will send:</p> <p>(A) Invoice of Rs. 15,000 (B) Debit Note of Rs. 900</p> <p>(C) Debit Note of Rs. 15,000 (D) Credit Note of Rs. 900</p> <p>OR</p> <p>Statement I: When a Sales Book is maintained, there is no need to open Sales Account in the ledger.</p> <p>Statement II: When a Cash Book is maintained, there is no need to open Cash Account in the ledger.</p> <p>(A) Statement I is correct but statement II is incorrect.</p> <p>(B) Statement I is incorrect but statement II is correct.</p> <p>(C) Both statements are correct</p> <p>(D) Both statements are incorrect</p>	1
9.	<p>If total assets are ₹1,00,000, Net Worth is ₹70,000, Creditors will be:</p> <p>a. ₹70,000 c. ₹1,00,000</p> <p>b. ₹30,000 d. ₹1,70,000</p> <p>OR</p> <p>If Capital is ₹70,000, Bill Payables are ₹30,000, total assets will be:</p> <p>a. ₹70,000 c. ₹1,00,000</p> <p>b. ₹30,000 d. ₹1,70,000</p>	1
10.	<p>Which of the following is not to be prepared by the business firm under any situation?</p> <p>a. Cash book with cash column</p> <p>b. Cash book with bank column</p> <p>c. Bank Reconciliation Statement</p> <p>d. Passbook</p>	1
11.	<p>Manipulation in account to show a better position than what actually is, known as:</p> <p>a. Reliability c. Comparability</p>	1

	b. Relevance	d. Window dressing	
12.	Imprest amount of petty cash book is Rs. 9,000. What will be the amount of reimbursement on July 1, 2023 if the following expenses were incurred by petty cashier during the month of June 2023. (1) Postage and Stamps 2,730 (2) Conveyance 2,460 (3) Stationeries 610 (4) Miscellaneous Expenses 430 (A) Rs. 9,000 (B) Rs. 6,230 (C) Rs. 2,770 (D) Rs. 15,230		1
13.	Identify the wrong statement from the following? a. Profit will increase the capital. b. Machines manufactured for sale will be treated as goods and not an asset. c. A liability arises because of the credit transactions. d. Trade discount is shown separately in the books of account.		1
14.	Which method of Depreciation assumes that an asset should be depreciated more in the earlier year and less in the later years of use? OR Which of the following is not recorded as 'Drawings' in the cash book? a. Life Insurance premium paid by the business. b. Income Tax paid by the sole proprietorship firm. c. Cash withdrawn for personal use against the capital. d. Goods taken for personal use.		1
15.	Credit balance of the cash book of Vinod & Sons on 31 March 2023 was ₹4,000. Cheque issued but not presented for payment ₹1,500 and Cheque deposited but not credited by the bank ₹1,200. Overdraft balance of Pass Book will be: a. ₹3,700 c. ₹6,700 b. ₹4,300 d. ₹1,300 OR Bank overdraft as per cash book on 31 st March 2023 was ₹40,000. Interest on overdraft charged by the bank ₹1,000 not entered in the cash book yet. There was a debit in the passbook for the bank charges ₹300. Overdraft balance as per pass book was a. ₹41,000 c. ₹39,300 b. ₹38,700 d. ₹41,300		1

16.	Identify the Contra entry from the following: a. Paid cash ₹280 in full settlement of ₹300. b. Cash ₹400 withdrawn from bank. c. Cheque received from Ramesh ₹500 and sent to bank on the same day. d. Withdrew from the bank for personal use ₹200.	1
17.	Goods and Services Tax is an ----- tax levied at prescribed rate on every ----- of goods and services except on petroleum and alcohol for human consumption. (A) indirect, purchases (B) indirect, business transaction (C) indirect, supply (D) direct, Expenses	1
18.	Which of the following should not be shown in the Journal Proper? a. Purchases or Sales of goods c. Dishonour of Bill b. Bad debts d. Goods destroyed by fire	1
19.	Quantitative transactions are recorded but qualitative transactions are not recorded, according to the principle of: a. Historical Cost c. Matching Principle b. Money Measurement d. Business Entity Principle	1
20.	Return inward book for March 2022 was under cast by ₹2,800. At the time of rectification: a. Suspense account Dr ₹2,800 c. Suspense account Cr ₹2,800 b. Suspense account Dr ₹5,600 d. Suspense account Dr ₹5,600 OR Purchase book was undercast by 1,900. At the time of rectification: a. Purchases account Dr 1,900 c. Purchases account Cr 1,900 b. Suspense account Dr 1,900 d. Suspense account Cr 3,800	1
21.	Mr. Advik was appointed as a factory manager on 15 September 2023. Mr Advik will be paid a salary of ₹25,000 per month. What transaction you will record on 15 September? Explain with reason. Or Y Ltd. has an asset of Rs.3,50,000; its salvage value is Rs 25,000; useful life 5 years. a) Calculate amount of depreciation under Straight Line Method. b) Rate of Depreciation under Straight Line Method. c) If next year Y Ltd. Adopt diminishing balance method, which accounting principle is violated?	3
22.	Explain the following principles.	3

	<div><div>(i) Full Disclosure Concept</div><div>(ii) Historical Cost concept</div></div> <div>OR</div> <div>If you prepare your accounts without following the accounting rules or accounting standards, the income tax authorities will not recognize your accounts. Why it is important to follow the accounting standards? Support your views with reasons.</div>											
23.	Explain the qualitative characteristics of Accounting Information ?	3										
24.	<div>You are required to determine the profit or Loss as per:</div> <div><div>(A) Cash basis of accounting</div><div>(B) Accrual basis of accounting</div></div> <table><thead><tr><th></th><th>Amount (Rs.)</th></tr></thead><tbody><tr><td>Professional fees received during the year (Including fees received in advance Rs. 24,000)</td><td>5,65,000</td></tr><tr><td>Professional fees earned but not received</td><td>29,000</td></tr><tr><td>Expenses paid during the year (Including expenses paid in advance Rs. 28,000)</td><td>3,76,000</td></tr><tr><td>Expenses due but not yet paid</td><td>39,000</td></tr></tbody></table> <div>OR</div> <div>Explain three difference between Cash basis of accounting and accrual basis of accounting</div>		Amount (Rs.)	Professional fees received during the year (Including fees received in advance Rs. 24,000)	5,65,000	Professional fees earned but not received	29,000	Expenses paid during the year (Including expenses paid in advance Rs. 28,000)	3,76,000	Expenses due but not yet paid	39,000	3
	Amount (Rs.)											
Professional fees received during the year (Including fees received in advance Rs. 24,000)	5,65,000											
Professional fees earned but not received	29,000											
Expenses paid during the year (Including expenses paid in advance Rs. 28,000)	3,76,000											
Expenses due but not yet paid	39,000											
25.	<div>Prepare Purchases A/c from the following transactions and balance the same.</div> <div>2022</div> <div>Dec. 2. Balance of Cash Rs. 40,000</div> <div>Dec. 3. Bought goods from Yash Rs. 30,000.</div> <div>Dec. 4. Received cash from Neeraj Rs. 18,000.</div> <div>Dce. 5. Bought goods for Cash Rs. 15,000 @ 20% trade discount.</div> <div>Dec. 8. Goods Rs. 3,000 and Cash Rs. 2,000 were withdrawn by proprietor for personal use.</div> <div>Dec. 12. Sold goods for cash Rs. 16,000.</div> <div>Dec. 25. Cash paid to Sushil Rs. 8,000.</div> <div>Or</div> <div>Open ‘T’ shape account for furniture and write the following on the proper side</div> <div><div>1. Furniture purchased for Rs.20,000</div><div>2. Furniture sold costing Rs.5,000</div><div>3. Furniture again purchased for Rs.8,000</div><div>4. Old furniture discarded for Rs.2,500</div><div>5. Picture was reduced by Rs.2,000</div></div>	3										
26.	<div>Explain three difference between provisions and reserves on the basis of</div> <div>1.Nature</div>	3										

	2.purpose 3.Effect on profit																									
27	<p>.Record the following transactions in the Sales Book of Ganika Electronics, Kolkata (West Bengal) 2020</p> <p>Jan.3 Sold to Ruchika Electronics, Vide Invoice No. 431 5 Colour T.V. Sets @ ₹20,000 each Less: Trade Discount 20%.</p> <p>Jan. 10 Sold to Garima Electronics, Patna (Bihar), Vide Invoice No. 432 10 Washing Machines @ ₹8,000 each Less: Trade Discount 25%.</p> <p>Jan. 12 Sold to Raghav & Sons, Kolkata, Vide Cash Memo No. 2510 6 Colour T.V. Sets @ 18,000 each Less Trade Discount 15%.</p> <p>Jan.16 Sold to Nitin Trading Company, Ranchi (Jharkhand) Vide Invoice No. 433. 8 Music Systems @ 15,000 each 10 Colour T.V. Sets @ 22,000 each Less: Trade Discount 20%.</p>	4																								
28	<p>Prepare a Bank Reconciliation Statement as on 31st October 2024 from the following information:</p> <p>i) Favourable balance as per Cash Book ₹1,26,100.</p> <p>ii) Cheque issued but not yet presented for payment ₹46,000.</p> <p>iii) Deposited three cheques for ₹12,000, ₹25,000 and ₹20,000 respectively in the month of October but out of these the first 2 cheques could be cleared by the bank so far.</p> <p>iv) Bank charges of ₹500 not yet recorded in the cash book.</p> <p>v) Directly deposited by a customer ₹16,000 not yet entered in the cash book.</p> <p>vi) The bank has paid insurance premium on standing order ₹12,400.</p>	4																								
29	<p>Prepare the Trial Balance of Akshit as on 31st March, 2021. He has omitted to open a Capital Account:</p> <table><tr><td>Bank Overdraft</td><td>85,000</td><td>Purchases</td><td>4,45,000</td></tr><tr><td>Sales</td><td>8,10,000</td><td>Cash in Hand</td><td>8,500</td></tr><tr><td>Purchases Return</td><td>22,500</td><td>Creditors</td><td>2,15,000</td></tr><tr><td>Debtors</td><td>4,00,500</td><td>Equipment</td><td>25,000</td></tr><tr><td>Wages</td><td>96,000</td><td>Sales Return</td><td>15,750</td></tr><tr><td>Capital</td><td>?</td><td>Opening Stock</td><td>3,00,500</td></tr></table> <p style="text-align: center;">OR</p> <p>Explain the meaning of Trial balance. Write any three difference between Trail Balance and Balance Sheet.</p>	Bank Overdraft	85,000	Purchases	4,45,000	Sales	8,10,000	Cash in Hand	8,500	Purchases Return	22,500	Creditors	2,15,000	Debtors	4,00,500	Equipment	25,000	Wages	96,000	Sales Return	15,750	Capital	?	Opening Stock	3,00,500	4
Bank Overdraft	85,000	Purchases	4,45,000																							
Sales	8,10,000	Cash in Hand	8,500																							
Purchases Return	22,500	Creditors	2,15,000																							
Debtors	4,00,500	Equipment	25,000																							
Wages	96,000	Sales Return	15,750																							
Capital	?	Opening Stock	3,00,500																							

30	<p>On 31 January 2023, my cash book showed a bank overdraft of ₹12,500. After comparing it with the passbook the following differences were noted:</p> <ol style="list-style-type: none">1. Cash and cheques amounting to ₹1,340 were sent to the bank on 25 January. But cheques worth ₹230 were credited on 2nd February and one cheque of ₹45 was returned by them as dishonoured on 4th Feb.2. During the month of Jan. I had issued cheques worth ₹1,670 to my creditors out of these cheques worth ₹1,370 were presented for payment on 5th February.3. According to my standing orders, the bankers have paid during the month of January, the following:<ol style="list-style-type: none">(i) Life insurance premium ₹170(ii) Licence fee ₹120(iii) Driving Licence fee ₹224. My bankers have collected ₹150 as dividends on the shows.5. My bankers have given one wrong credit for ₹150.6. Interest charged by bank ₹1,250. <p>prepare a Bank Reconciliation Statement</p>	6												
31	<p>Journalise the following transactions:</p> <ol style="list-style-type: none">1. Bought goods at the list price of Rs. 30,000 from Vishwas, less 20% trade discount and 2% cash discount and paid 70% by cheque.2. Sold goods to Rehan For Rs. 2,00,000 at 10% Trade Discount and 5% cash discount.3. Prepaid insurance Rs.5,000.4. Ajit is declared insolvent. Received from his Official Receiver 40 paise in a rupee on a debt of Rs.70,000.5. Provide 12% interest on capital amounting to Rs. 10,00,000.6. Salaries due to clerks Rs.50,000 <p>OR</p> <p>Journalize the following transactions:</p> <table><tr><td>a</td><td>Commenced business with Cash ₹50,000 and Stock of goods ₹10,000.</td></tr><tr><td>b</td><td>Goods worth ₹600 are given as free samples.</td></tr><tr><td>c</td><td>Out of the rent paid for the year ₹13,000, ₹1,000 relates to the next year.</td></tr><tr><td>d</td><td>Received commission ₹15,000 out of which ₹3,000 received as advance for the next year.</td></tr><tr><td>e</td><td>A personal laptop was brought into the business worth ₹10,000 and a personal motorcycle was sold for ₹30,000 and money was brought into the firm.</td></tr><tr><td>f</td><td>Goods destroyed by fire ₹2,000 and the Insurance Company accepted and paid the full claim.</td></tr></table>	a	Commenced business with Cash ₹50,000 and Stock of goods ₹10,000.	b	Goods worth ₹600 are given as free samples.	c	Out of the rent paid for the year ₹13,000, ₹1,000 relates to the next year.	d	Received commission ₹15,000 out of which ₹3,000 received as advance for the next year.	e	A personal laptop was brought into the business worth ₹10,000 and a personal motorcycle was sold for ₹30,000 and money was brought into the firm.	f	Goods destroyed by fire ₹2,000 and the Insurance Company accepted and paid the full claim.	6
a	Commenced business with Cash ₹50,000 and Stock of goods ₹10,000.													
b	Goods worth ₹600 are given as free samples.													
c	Out of the rent paid for the year ₹13,000, ₹1,000 relates to the next year.													
d	Received commission ₹15,000 out of which ₹3,000 received as advance for the next year.													
e	A personal laptop was brought into the business worth ₹10,000 and a personal motorcycle was sold for ₹30,000 and money was brought into the firm.													
f	Goods destroyed by fire ₹2,000 and the Insurance Company accepted and paid the full claim.													
32	<p>From the following transactions , Prepare Cash Book with Cash and Bank Columns (Double Column Cash Book) :</p> <table><tr><td>2022</td><td></td><td>Rs.</td></tr><tr><td>March 1</td><td>Cash in Hand</td><td>70,000</td></tr><tr><td></td><td>Bank overdraft</td><td>50,000</td></tr></table>	2022		Rs.	March 1	Cash in Hand	70,000		Bank overdraft	50,000	6			
2022		Rs.												
March 1	Cash in Hand	70,000												
	Bank overdraft	50,000												

	March 4	Sold goods for Cash	50,000	
	March 5	Cash deposited into bank	80,000	
	March 6	Purchased goods from Mahi	30,000	
	March 7	Cheque issued to Mahi in full settlement	28,800	
	March 8	Withdrawn from bank for personal use	5,000	
	March 12	Sold goods to Ajay and cheque received from him	25,000	
	March 17	Cheque received from Ajay Deposited into bank		
	March 20	Bank Charges	500	
	March 22	Interest charged by bank	2,500	
	March 23	Received cash from Ranu	28,000	
	March 30	Paid life insurance Premium by cheque	15,000	
33	Prepare Accounting Equation from the following transactions: 1. Akshita started business with cash Rs. 3,00,000 and Goods Rs. 50,000. 2. Purchased goods from Kanak for cash Rs.20,000 and on credit Rs.15,000. 3. Sold goods (costing Rs.45,000) for Rs. 65,000 out of which Rs. 40,000 received in cash. 4. Outstanding Rent Rs. 2,000. 5. Furniture of 20,000 purchase from Ram in cash 6. Interest on capital paid 1,000			6
34	On 1st April 2015 , A Ltd. Purchased a Machinery for 2,40,000 and spent ₹ 10,000 on its erection. On 1st October, 2015, an additional costing 1,00,000 was purchased On 1st October, 2017, the machine purchased on 1st April, 2015 was sold for 1,43,000 and on the same date, a new machine was purchased at a cost of 2,00,000 Show the Machinery Account for the first four financial years after charging Depreciation at 5% p.a. by the Straight Line Method OR The Tanishq Transport Company purchased 10 Trucks at ₹90,000 each on 1st April 2021. On 1st October 2023 one of the Trucks was involved in an accident and is completely destroyed. Rs. 56,200 was received from the Insurance company in full settlement. On the same date another truck was purchased by the company for the sum of 1,00,000. The company writes off 20% per annum on the Diminishing Balance Method. The company maintains the calendar year as its financial year. Show the Truck Account for four years ending 31st December, 2024.			6

KENDRIYA VIDYALAYA BHUBANESWAR REGION
HALF YEARLY EXAMINATION(2024-2025)

CLASS XI

TIME:3 HOURS

SUBJECT: BUSINESS STUDIES

MAX MARKS:80

General Instructions:

This is a Subjective Question Paper containing 34 questions.

This paper contains 20 questions of 1 mark each, 4 questions of 3 marks each, 6 questions of 4 marks each and 4 questions of 6 marks each.


Marks are indicated against each question.

3 marks questions are to be answered in 50-70 words.

4 marks questions are to be answered in 120-150 words.

6 marks questions are Long Answer Type Questions and are to be answered in 180-200 words.

Sr no	Question	Marks
1	Which one of the following activity cannot be considered as an objective of business? (a) Investment (b) Productivity (c) Innovation (d) Profit earning	1
2	A person is considered a.....partner if, through his/her own initiative, conductor behaviour, he/she gives an impression to others that he/she is a partner of the firm. (a) Active partner (b) Dormant partner (c) Secret partner (d) Partner by estoppel	1
3	Ravi insured his shop for Rs 2,00,000 against fire. Due to fire in his shop, he suffered a loss of stock worth Rs 1,20,000, He wants to recover the entire policy amount of Rs 2,00,000 from the insurance company. Identify the relevant insurance principle in this regard. (a) Subrogation (b) Mitigation of loss (c) Proximate cause (d) Indemnity	1
4	Which of the following is not a merit of Departmental undertaking? (a) Facilitate the Parliament to exercise effective control over their operations (b) High degree of operational flexibility (c) High degree of public accountability (d) Good source of income for the government	1
5	Sweets making and confectionery items represents which type of industry (a) Primary industry (b) Secondary industry (c) Tertiary industry (d) Commercial industry	1
6	Which document is considered as the birth certificate of the company? (a) Prospectus (b) Certificate of commencement of business	1

	(c) Certificate of incorporation (d) Article of association	
7	State which of the following statement is false? (a) Recurring deposit account is a time deposit account (b) Number of transactions every month is limited in saving bank account (c) A current account can be opened with an initial deposit of Rs 5000 (d) Fixed deposit account is a demand deposit account	1
8	The picture represents one of the public sector enterprises? Identify this.  (a) Joint stock company (b) Departmental undertaking (c) Statutory Corporation (d) Government Company	1
9	These types of societies are established to help small producers in selling their products. (a) Credit cooperative societies (b) Producer's cooperative societies (c) Marketing cooperative societies (d) Consumer's cooperative societies	1
10	"To adopt fair trade practices." It is an example of social responsibility of business towards..... (a) Owners (b) Government (c) Consumers (d) Workers	1
11	Which of the following is not a type of public sector enterprise? (a) Joint Stock Company (b) Departmental undertaking (c) Statutory Corporation (d) Government Company	1
12	Assertion(A)Board of directors exercise direct control over the joint stock company. Reason(R)Board of directors are considered as the real owners of the company. (a) Both Assertion(A) and Reason(R) are true and Reason(R) is correct explanation of Assertion(A) (b) Both Assertion(A) and Reason(R) are true and Reason(R) is not correct explanation of Assertion(A) (c) Assertion(A) is true but reason(R) is false. (d) Assertion(A) is false but reason(R) is true.	1
13	Business risk arise due to bursting of boiler of machine would emerge due to which of the following cause?	1

	(a) Natural cause (b) Human cause (c) Physical cause (d) Economic cause													
14	<table><tr><td colspan="2">Match the statement given under Column I with correct option given under Column II</td></tr><tr><td>Column I</td><td>Column II</td></tr><tr><td>A.Responsibility towards the society</td><td>1.To supply right quality of goods at a reasonable prices</td></tr><tr><td>B. Responsibility towards the consumers</td><td>2.To protect natural environment and avoid pollution</td></tr><tr><td>C.Responsibility towards the Government</td><td>3.To ensure fair wages from the management</td></tr><tr><td>D.Responsibility towards the Workers</td><td>4.To abide by rules and regulation</td></tr></table> <p>Codes A B C D (a) 1, 3, 2, 4 (b) 2, 1, 4, 3 (c) 4, 3, 2, 1 (d) 1, 4, 3, 2</p>	Match the statement given under Column I with correct option given under Column II		Column I	Column II	A.Responsibility towards the society	1.To supply right quality of goods at a reasonable prices	B. Responsibility towards the consumers	2.To protect natural environment and avoid pollution	C.Responsibility towards the Government	3.To ensure fair wages from the management	D.Responsibility towards the Workers	4.To abide by rules and regulation	1
Match the statement given under Column I with correct option given under Column II														
Column I	Column II													
A.Responsibility towards the society	1.To supply right quality of goods at a reasonable prices													
B. Responsibility towards the consumers	2.To protect natural environment and avoid pollution													
C.Responsibility towards the Government	3.To ensure fair wages from the management													
D.Responsibility towards the Workers	4.To abide by rules and regulation													
15	Which distribution channel is used in e-Business? (a) Retailer (b) Wholeseller (c) Both (a) and (b) (d) None of above	1												
16	A complain is lodged by a customer about the product at the company call center number provided by the company on its label. Which type of e-business transaction is this? (a) C to C Commerce (b) B to C Commerce (c) C to B Commerce (d) B to B Commerce	1												
17	Mr Keshav started a business of buying and selling of LG company all items(like refrigerators, washing machines and TV sets etc).The business of Mr Keshav will be considered as..... (a) Commerce (b) Trade (c) Selling (d) Transaction	1												
18	Intra B commerce transactions may be conducted for (a) Human resource management (b) Promotional activities (c) Selling and distribution of goods (d) After sale services	1												
19	Which of the following is not the social responsibility of business towards investors? (a) To ensure proper utilization of capital (b) To ensure proper dividend (c) To give appropriate salary on time	1												

	(d) To ensure safety of capital	
20	<p>Stages in the formation of a public company are in the following order.</p> <p>(a) Promotion, commencement of business, incorporation , capital subscription</p> <p>(b) Promotion, incorporation, commencement of business, , capital subscription</p> <p>(c) Incorporation, Promotion, capital subscription, commencement of business</p> <p>(d) Promotion, incorporation, capital subscription , commencement of business</p>	1
21	<p>Vakuntha and Bakuntha wants to set up a cotton fabric production unit under the brand name “Shree”. Their main job is to convert cotton into yarn and yarn into fabric. The fabric is available in different varieties. They want to earn reasonable profit of 10% on cost and they want to make popular their brand in the market. But due to other fabrics like(silk,crepe and linen) they have to suffer a loss. So they decided to expand their business by providing different varieties fabrics to customers.</p> <p>By quoting lines from the above paragraph, explain any three characteristics of business.</p>	3
22	<p>Write any three features of a company which operates its business in more than one country.</p> <p style="text-align: center;">Or</p> <p>Write any three features of that enterprises in which a project is financed and operated by a partnership of government and private enterprise.</p>	3
23	<p>Kirti is fond of buying dresses online. She bought a new western dress from a online site after reading reviews and ratings of customers. But when she received the dress the colour and size was different. Now she want to return the dress. So she placed a request for order replacement.</p> <p>On the basis of given information about Kirti, answer the following questions: Explain the types of e-Business transactions mentioned here quoting lines from the above.</p>	1.5.+1. 5
24	<p>Explain any three elements of business ethics.</p> <p style="text-align: center;">Or</p> <p>Write any three cases for social responsibility.</p>	3
25	<p>What is the role of profit in business? (Explain any four points)</p> <p style="text-align: center;">Or</p> <p>Explain any two economic objectives and two social objectives of business.</p>	4
26	<p>All India radio is one of the largest broadcasting organisation in the world in terms of the number of languages and broadcast. This organization is managed by Ministry of Information and Broadcasting. This is the feature of one of the public sector undertaking.</p> <p>(a)Identify and define the type of public sector undertaking.</p> <p>(b)State any three features of public sector undertaking mentioned above in part(a)</p>	1+3
27	Write any four benefits of e-business.	4
28	<p>Mrs. Jaya is a owner of sari making business. Her main motive is maximizing the profit. For this she is charging high prices from the customers while supplying very cheap quality sari. Even she is not providing good working condition to the female workers and does not want to pay them reasonable remuneration. As a result female workers are not ready to do work in the organization. Even the customers are not ready to buy the products her profit is also decreasing day by day.</p> <p>What should be done by Mrs. Jaya to resolve this problem.</p>	4
29	<p>What is e-Banking? Explain any three types of digital payments.</p> <p style="text-align: center;">Or</p> <p>Define any four types of bank accounts.</p>	1+3 Or

		1+1+1+1
30	<p>Three friends Pulkit, Chandan and Sujoy started a business of fruit juices and refreshing drinks. All of them invested capital in the business. After starting this business Pulkit had placed one condition before Chandan and Sujoy that he will contribute capital only but it is not possible for him to manage the business. Chandan and Sujoy accepted this condition.</p> <p>(a) Which type of partners are Pulkit, Chandan and Sujoy. Explain the type also.</p> <p>(b) Explain any two merits of this form of business enterprises.</p>	1+1+2
31	<p>Explain any three merits and demerits of Statutory corporation.</p> <p style="text-align: center;">Or</p> <p>Explain any three merits and demerits of Government company.</p>	3+3
32	<p>(a) "One person control is considered the best control in this world" Justify this statement.</p> <p>(b) Differentiate between Public company and Private company on the basis of</p> <p style="padding-left: 20px;">(i) No of members</p> <p style="padding-left: 20px;">(ii) Public invitation of capital</p> <p style="padding-left: 20px;">(iii) Commencement of business</p> <p style="text-align: center;">Or</p> <p>(a) Explain any three types of cooperative societies.</p> <p>(b) Differentiate between cooperative societies and partnership on the basis of</p> <p style="padding-left: 20px;">(i) Registration and Act</p> <p style="padding-left: 20px;">(ii) No of members</p> <p style="padding-left: 20px;">(iii) Control and management</p>	3+3
33	<p>Vimal has taken a fire insurance policy for his shop of Rs 5,00,000 from company A and 10,00,000 from company B as well as he has also taken a life insurance policy of Rs 5,00,000 in his name. But he did not disclose one of the fact related his health that he is suffering from diabetes. After few months his shop caught fire and he suffered a loss of Rs 800000. But now Vimal wants to claim whole amount from both of the company. The companies are ready to pay only 800000 but in proportion of insured amount. The damaged goods of shop can be sold for Rs 65,000. But Vimal wants to sell the damaged portion and wants to earn more than his loss.</p> <p>Identify the insurance principle followed and violated in the above mentioned case by quoting lines.</p>	1.5+1.5+1.5+1.5
34	<p>Surya Narayan wants to start up a new business of electronics items. He is facing a lot of problems. The biggest challenge for electronics industry is to fulfill increasing demand of customers for smart electronics devices. One more problem is there that Surya Narayan company have to face a lot of competition as so many competitors are available in the market and he does not know how to attract the potential buyers towards his products. The demand for the electronics items is high and he wants to meet the demand of the customers on time. He wants to sell his products in different parts of the country but he does not know how to provide these item in different parts of the country. For all this he requires a lot of money this is also the main problem of Mr Surya Narayan.</p> <p>Identify the main four problems faced by Mr Surya Narayan by quoting lines from the above paragraph and how can he overcome from all these problems.</p>	1.5+1.5+1.5+1.5

- *It is compulsory for all to prepare the Project file on **ANY ONE** of the following topics.*
 - *The Internal Assessment of Term II will be in the form of Project Portfolio/Project Report and Viva. Both Project and Viva will carry 5 Marks each.*
 - *The Project Report is needed to be completed in 1000 words in your own handwriting.*
-

Project-Portfolio/ Project Report

The Project-Portfolios is a compilation of the work that the students produce during the process of working on their ALS Project. The Project-Portfolio may include the following:

PROJECT FILE

Page 1 : COVER PAGE, WITH TITLE OF PROJECT, SCHOOL DETAILS/DETAILS OF STUDENTS.

Page 2 : STATEMENT OF PURPOSE/OBJECTIVES/GOALS

Page 3 : CERTIFICATE OF COMPLETION UNDER THE GUIDANCE OF THE TEACHER.

Page 4 : ACTION PLAN FOR THE COMPLETION OF ASSIGNED TASKS.

Mid Pages : PROJECT/REPORT DETAILS(Graphics and pictures to be pasted on left hand side and content of the report to be written in your own handwriting on the right hand side of the page.

Last Page : LIST OF RESOURCES/BIBLIOGRAPHY

PROJECT TOPICS (Do your project on ANY ONE of the following)

You have to make pictorial as well as graphical presentation on left hand side of the file. All data should be collected authentically and hand written essay of 1000 words on right side.

TOPIC 1 – *WE ARE NOT AFRAID TO DIE*

- Explore the theme of courage, unity and resilience through a detailed summary, character sketches and a critical analysis of the family's determination to survive.
- State some other examples of adventurous journeys taken by other authors around the world.

TOPIC 2 – *THE ADDRESS*

- Collect data about how World War II and its effect on Jewish people.
- How the narrator's family suffered the effect of war
- Give a comparison between Pre and Post situation of World War II and its effect on common people.

TOPIC 3 – *DISCOVERING TUT*

- What is the unsolved mystery of King Tutankhamun?
- Collect data about different mummies found in Egypt and interesting facts about them?
 - What is the reality of 'the curse of the pharaoh'?



पीएम श्री केन्द्रीय विद्यालय खुर्दा रोड

शरदकालीन अवकाशीय गृहकार्य
कक्षा-11



दिन 1 – पठन एवं सार लेखन

आरोह भाग-1 से कोई भी एक गद्य पाठ पढ़ें और उसका 200 शब्दों का सारांश लिखें।
साथ ही 5 नए शब्द चुनकर उनके अर्थ व वाक्य बनाएँ।

दिन 2 – काव्य-विश्लेषण

आरोह (कविता खंड) से एक कविता चुनें।
उसमें प्रयुक्त प्रतीक और अलंकार पहचानें और 8-10 पंक्तियों में उनका प्रभाव लिखें।
उसी विषय पर अपनी 6-8 पंक्तियों की छोटी कविता रचें।

दिन 3 – नाट्य रूपांतरण

वितान भाग-1 से "आलो आंधारि " या कोई कहानी लेकर उसका 3-5 मिनट का संवाद रूपांतरण कीजिए।
1-2 पात्रों का अभिनय करके ऑडियो/वीडियो रिकॉर्डिंग बनाइए।

दिन 4 – लेखन कौशल

अभिव्यक्ति और माध्यम पुस्तक के आधार पर "आज का युवा और करियर विकल्प" पर निबंध (250 शब्द) लिखें।
तीन उपशीर्षक का प्रयोग करें।

दिन 5 – समाचार/साक्षात्कार

किसी बुजुर्ग या शिक्षक से मिलकर "शिक्षा का बदलता स्वरूप" पर 4-5 प्रश्नों का साक्षात्कार तैयार करें और उत्तर लिखें।

इसे 200 शब्दों में रिपोर्ट शैली में लिखें।

दिन 6 – समीक्षा लेखन

किसी हिंदी फिल्म/नाटक/कहानी-पुस्तक को देखकर/पढ़कर उसका समीक्षा लेख (200 शब्द) लिखिए।

दिन 7 – व्याकरण/भाषा कौशल

अभिव्यक्ति और माध्यम से दिए गए अभ्यास के अनुसार 20 वाक्यों में अप्रत्याशित लेखन करें।

या

किसी पसंदीदा चलचित्र की कहानी अपने शब्दों में लिखें।

दिन 8 – भाषण लेखन

“भारत में पर्यावरण संरक्षण” विषय पर 2 मिनट का भाषण लिखें और रिकॉर्ड करें।

दिन 9 – आलोचनात्मक सोच

वितान भाग-1 के किसी पाठ को पढ़कर उसका चरित्र-चित्रण कीजिए।

साथ ही लेखक की शैली पर 100 शब्दों का टिप्पणी दें।

दिन 10 – पोर्टफोलियो एवं आत्म-प्रतिबिंब

पूरे अवकाश के दौरान किए गए कार्यों का पोर्टफोलियो बनाइए।

150 शब्दों में लिखें कि आपको किस कार्य से सबसे अधिक सीख मिली और क्यों।

NEP 2020 से सामंजस्य

गतिविधि-आधारित शिक्षा – अभिनय, साक्षात्कार, पोस्टर, पोर्टफोलियो।

आलोचनात्मक चिंतन – समीक्षा, चरित्र-चित्रण, काव्य-विश्लेषण।

जीवन कौशल – संचार, संवाद, प्रस्तुति, लेखन।

सभी स्तरों के लिए उपयुक्त – आसान से कठिन तक गतिविधियाँ दी गईं।

जय हिंद : जय हिंदी

PM SHRI KENDRIYA VIDYALYA KHURDA ROAD
Class 11 Computer Science / Informatics Practices
Worksheet

Class 11 – Computer Science
Worksheet : Python – Strings

1. (a) What is the difference between immutable and mutable data types in Python?

(b) Why are strings considered immutable?

2. Identify the output of:

```
s = "KhurdaRoad"
```

```
print(s[2:7])
```

```
print(s[-3:])
```

3. Write a Python expression to find the length of a string msg without built in function.

4. Program: Accept a sentence and count vowels, consonants, digits, and spaces.

5. Write a program to check whether an input string is a palindrome.

6. What will be printed? Explain.

```
print("Railway".upper().islower())
```

7. Program to accept a string count number of words present in it.

8. Differentiate between the string methods: find(), index(), find().

9. Write a single statement to display a string in reverse order using slicing.

10. Program to count number of uppercase and lowercase characters of a text.

Class 11 – Informatics Practices

Worksheet : Python – Lists

1. Explain the difference between a list and a tuple.

2. Predict the output:

```
L = [10, 20, 30, 40]
```

```
print(L[1:3])
```

```
print(L[-2:])
```

3. Write Python code to create a list of 5 numbers and print their sum and average.

4. Program to input a list of numbers and print only the even numbers.

5. Name two list methods used to add and remove elements.

6. Program to find the largest and smallest value in a list without using `max()` or `min()`.

7. How is the `append()` method different from `extend()`?

8. Write a Python statement to insert the value 99 at position 2 in a list named scores.

9. Program to merge two lists and display the resultant list.

10. Explain with an example how list slicing can be used to reverse a list.

PM SHREE KV Khurda Road

HOLIDAY HOMEWORK FOR AUTUMN BREAK-2025-26

CLASS XI

SUBJECT: ECONOMICS

Q.N.	QUESTION	Marks
1	Define Production Possibility Curve. Explain why it is downward sloping from left to right?	4
2	State the central problems of an economy. Explain each problem with examples.	4
3	Explain consumer's equilibrium, in case of a single commodity, with the help of a utility schedule.	6
4	Using indifference curves approach, explain the conditions of consumer's equilibrium.	6
5	Define demand. Explain how it is different from desire and wants with suitable examples.	6
6	Explain the concepts: Histogram, Ogive and Time Series graph with tables and graphs.	6
7	Define statistics. State the functions of statistics.	6
8	State and explain the various methods of collecting primary data.	6
9	Explain the difference between Census and Sampling methods of data collection. Which one is suitable method of data collection and why?	6
10	What is organization of data? Explain various types of classification of data with examples.	6

Note: 1. The questions of 4 marks to be written in 80 words and questions of 6 marks to be written in 120 words each.

2. The holiday homework to be written Economics notebook. No separate copy to be prepared.



पीएम श्री केन्द्रीय विद्यालय खुर्दा रोड



✿ शरद काली अवकाशीय गृहकार्य

कक्षा-12

दिन 1 – पठन एवं सार लेखन

आरोह भाग-2 (गद्य) से कोई एक निबंध पढ़ें और उसका 200 शब्दों में सार लिखें।

कठिन शब्दों का शब्दार्थ भी दीजिए।

दिन 2 – कविता विश्लेषण व रचना

आरोह (कविता खंड) की एक कविता चुनकर उसमें प्रयुक्त प्रतीक, बिंब और अलंकार की पहचान कीजिए।

फिर उसी विषय पर अपनी 8-10 पंक्तियों की मौलिक कविता लिखिए।

दिन 3 – वितान आधारित नाट्य रूपांतरण

वितान भाग-2 से " अतीत में दबे पाँव" या कोई कहानी चुनकर उसका 3-4 पृष्ठ का नाट्य रूपांतरण (संवाद) तैयार कीजिए।

घर पर 2-3 पात्रों के साथ अभिनय/रिकॉर्डिंग करें।

दिन 4 – निबंध लेखन (अभिव्यक्ति)

“भारत @2047” विषय पर 250 शब्द का निबंध लिखें।

इसमें उपशीर्षक और उदाहरणों का प्रयोग करें।

दिन 5 – साक्षात्कार एवं रिपोर्ट

किसी शिक्षक/अभिभावक का 5 प्रश्नों वाला साक्षात्कार तैयार कीजिए (विषय: शिक्षा या समाज)।

उसका 200 शब्दों में रिपोर्ट स्वरूप तैयार करें।

दिन 6 – समीक्षा लेखन

किसी हिंदी फिल्म/नाटक/पुस्तक को देखकर उसकी समीक्षा (200–250 शब्द) लिखिए।

शीर्षक, कथा-संक्षेप, संदेश और व्यक्तिगत मत शामिल करें।

दिन 7 – व्याकरण और भाषा कौशल

किसी अप्रत्याशित विषय पर 20 वाक्यों में लेखन करें।

दिन 8 – भाषण लेखन

“समानता और समावेशी समाज” विषय पर 3 मिनट का भाषण लिखें और रिकॉर्ड करें।

दिन 9 – आलोचनात्मक समीक्षा

आरोह भाग-2 की किसी कहानी/निबंध/कविता का 250 शब्दों में आलोचनात्मक विश्लेषण कीजिए।

लेखक की शैली और समकालीन प्रासंगिकता पर टिप्पणी जोड़ें।

दिन 10 – पोर्टफोलियो व आत्म-प्रतिबिंब

पूरे 9 दिनों के सभी कार्यों का संकलन (Portfolio) बनाइए।

200 शब्दों में लिखें — “मेरे लिए इस गृहकार्य की सबसे उपयोगी गतिविधि कौन-सी रही और क्यों?”

NEP 2020 से सामंजस्य

गतिविधि-आधारित शिक्षा → अभिनय, भाषण, पोस्टर/नाटक।

आलोचनात्मक चिंतन → समीक्षा, विश्लेषण, चरित्र-चित्रण।

जीवन-कौशल → संचार, साक्षात्कार, रिपोर्ट लेखन।

सभी स्तरों के लिए उपयुक्त → सरल से कठिन तक मिश्रित कार्य।

जय हिन्द : जय हिंदी

General Instructions :

Read the following instructions carefully and follow them :

- (i) *This question paper contains **33** questions. **All** questions are **compulsory**.*
- (ii) *Question paper is divided into **five** sections – Sections **A, B, C, D** and **E**.*
- (iii) ***Section A** questions number **1** to **16** are multiple choice type questions. Each question carries **1** mark.*
- (iv) ***Section B** questions number **17** to **21** are very short answer type questions. Each question carries **2** marks.*
- (v) ***Section C** questions number **22** to **28** are short answer type questions. Each question carries **3** marks.*
- (vi) ***Section D** – questions number **29** and **30** are case-based questions. Each question carries **4** marks. Each question has subparts with internal choice in one of the subparts.*
- (vii) ***Section E** – questions number **31** to **33** are long answer type questions. Each question carries **5** marks.*
- (viii) *There is no overall choice. However, an internal choice has been provided in Sections B, C and D of the question paper. A candidate has to write answer for only **one** of the alternatives in such questions.*
- (ix) *Kindly note that there is a separate question paper for Visually Impaired candidates.*
- (x) *Wherever necessary, neat and properly labelled diagrams should be drawn.*

SECTION A

*Questions no. **1** to **16** are Multiple Choice Type Questions, carrying **1** mark each.*

16×1=16

1. In which of the following plants are both male and female flowers born on the same plant and the mode of pollination can be geitonogamy or xenogamy ?

- | | |
|------------|---------------|
| (A) Papaya | (B) Date Palm |
| (C) Maize | (D) Spinach |

2. Which one of the following hormones is secreted by the human placenta that helps in the maintenance of pregnancy ?

- | | |
|--------------|----------------------------------|
| (A) Relaxin | (B) Human Chorionic Gonadotropin |
| (C) Oxytocin | (D) Human Placental Lactogen |



3. The periodic abstinence by a couple for family planning should be from :

- (A) Day 5 to 10 of menstrual cycle
- (B) Day 13 to 15 of menstrual cycle
- (C) Day 10 to 17 of menstrual cycle
- (D) Day 16 to 20 of menstrual cycle

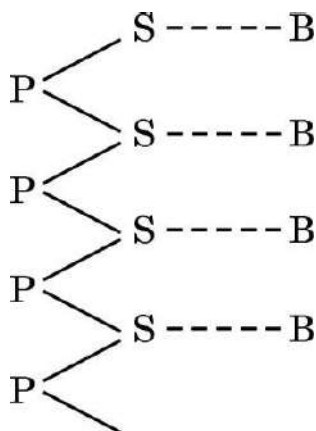
4. Select the **incorrect** match from the following :

<i>Human Karyotype</i>		<i>Characters</i>
(A) 45 + XX	–	Broad palm with characteristic palm crease
(B) 44 + XXY	–	Overall feminine development
(C) 44 + XO	–	Sterile females as ovaries are rudimentary
(D) 44 + XY	–	Normal male

5. You know that there are twenty different types of naturally occurring amino acids and four different types of bases in the DNA. A combination of 3 such bases code for a specific amino acid. If instead there are 96 different amino acids and 12 different bases in the DNA, then the minimum number of combination of bases required to form a codon is :

- | | |
|-------|-------|
| (A) 6 | (B) 8 |
| (C) 2 | (D) 4 |

6. The type of bond represented by the dotted line '-----' in a schematic polynucleotide chain is :



- | | |
|--------------------------|-------------------------|
| (A) Hydrogen bond | (B) Peptide bond |
| (C) N-glycosidic linkage | (D) Phosphodiester bond |



7. In which of the following conditions/diseases is there a substantial increase in the activity of mast cells observed in the human body ?
- (A) Typhoid (B) Allergy
(C) Ascariasis (D) AIDS
8. *Lactobacillus* that sets milk into curd is categorised as :
- (A) Cyanobacteria (B) Archaeobacteria
(C) Chemosynthetic bacteria (D) Heterotrophic bacteria
9. Which one of the following transgenic animals is being used to test the safety of the polio vaccine ?
- (A) Sheep (B) Goat
(C) Pig (D) Mice
10. Restriction Endonuclease – Hind II always cuts DNA molecules at a particular point by recognising a specific sequence of :
- (A) Six base pairs (B) Four base pairs
(C) Seven base pairs (D) Three base pairs
11. The improved trait that is found in the genetically modified transgenic crop – Golden rice is :
- (A) High lysine content
(B) Insect resistant
(C) High protein content
(D) High vitamin-A content
12. The rate of formation of new organic matter by consumers, and the biomass available for consumption of herbivores as well as decomposers are referred to as :
- (A) Gross primary productivity and Net primary productivity
(B) Net primary productivity and Secondary productivity
(C) Secondary productivity and Net primary productivity
(D) Secondary productivity and Gross primary productivity



For Questions number **13** to **16**, two statements are given— one labelled as Assertion (A) and the other labelled as Reason (R). Select the correct answer to these questions from the codes (A), (B), (C) and (D) as given below.

- (E) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of the Assertion (A).
- (F) Both Assertion (A) and Reason (R) are true, but Reason (R) is **not** the correct explanation of the Assertion (A).
- (G) Assertion (A) is true, but Reason (R) is false.
- (H) Assertion (A) is false, but Reason (R) is true.

13. Assertion (A) : The laws of our country permit legal adoption and it is as yet, one of the best methods for childless couples looking for parenthood.

Reason (R) : Emotional, religious and social factors are no deterrents to the legal adoption of orphaned and destitute children in India.

14 Assertion (A) : Linked genes do not show dihybrid F₂ ratio 9 : 3 : 3 : 1.

Reason (R) : Linked genes do not undergo independent assortment.

15. Assertion (A) : *Agrobacterium tumefaciens* is a pathogen of several monocot plants.

Reason (R) : It is able to deliver a piece of DNA known as ‘T-DNA’ to transform normal plant cells into a tumor.

16.Assertion (A) : Indian Government has set up an organisation known as GEAC to decide the validity of GM research.

Reason (R) : Genetic modification of organisms has no effect when such organisms are introduced in the ecosystem.

SECTION B

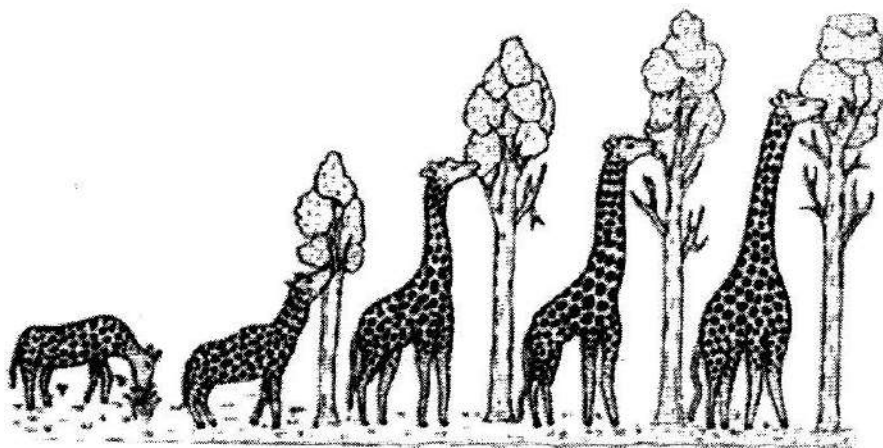
17. Identify A, B, C and D in the table given below :

$$4 \times \frac{1}{2} = 2$$

<i>Terms</i>	<i>Part of the plant it represents</i>
Pericarp	'A'
'B'	Cotyledon in seed of grass family
Embryonal axis	'C'
'D'	Remains of nucellus in a seed

18. Observe the picture given below. Name the naturalist and write the explanation given by him that evolution of life forms had occurred on the basis of this example.

2



19. Write the basic steps followed in the Assisted Reproductive Technologies (ART) programme to help childless couples. Why is it also known as test tube baby programme ?

2

20. (a) A farmer while working on his farm was bitten by a poisonous snake. He was rushed to a nearby health centre where the doctor gave him an injection to save his life.

(i) What did the doctor inject and why ?

$$1 \frac{1}{2}$$

(ii) Name the kind of immunity provided by this injection.

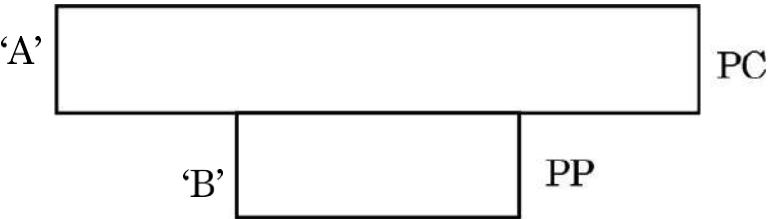
$$\frac{1}{2}$$

OR

- (b) Why do organic farmers not recommend complete eradication of insect pests ? Explain giving reason.

2

21.Study the diagram of a pyramid of biomass given below. Name the two standing crops that could be occupying level ‘A’ and level ‘B’ in it. Name this type of pyramid and the ecosystem in which it is found. 2



SECTION C

22.Explain the mode of action of contraceptive pills taken by human females. Mention the schedule to be followed for effective outcome. 3

23.

(a)

Name and write two characteristics of the type of DNA that forms the basis of DNA fingerprinting technique.

1+1

(b)

Mention any two applications of this technique.

$\frac{1}{2} + \frac{1}{2}$

24.

(a)

Explain the significance of the experiment carried out by S.L. Miller. Name the scientists whose hypothesis prompted him to carry out this experiment.

$2\frac{1}{2}$

(b)

How does meteorite analysis favour this hypothesis ?

$\frac{1}{-}$
- ~~~~~

P.T.O.

25. Identify A, B, C, D, E and F in the table given below :

3

<i>Name of Human Disease</i>	<i>Causative Organism</i>	<i>Symptoms</i>
Pneumonia	<i>Streptococcus</i>	'A'
Typhoid	'B'	High fever, weakness, headache, stomach pain
Common Cold	Rhino virus	'C'
Ringworm	'D'	Dry scaly lesions on body parts, redness, itching
Ascariasis	<i>Ascaris</i>	'E'
'F'	<i>Entamoeba histolytica</i>	Constipation, cramps, stools with mucous and blood clots

26. In a family, the father, the daughter and the son are colour blind, whereas the mother has normal vision. Do you think the son and the daughter have inherited the disease from their father ? Work out a cross to justify your answer.

3

27. (a) (i) What are transgenic animals ?

1

(ii) Name the first transgenic cow and state its importance.

2

OR

(b) (i) Explain the convention for naming EcoRI.

2

(ii) With the help of an illustration only, show the action of EcoRI on a DNA Polynucleotide.

1

28. (a) Explain how it is ensured that the orchid *Ophrys* is pollinated by a specific species of bee.

2

(b) Describe co-evolution with the help of this example.

1

~~~~~

P.T.O.

## SECTION D

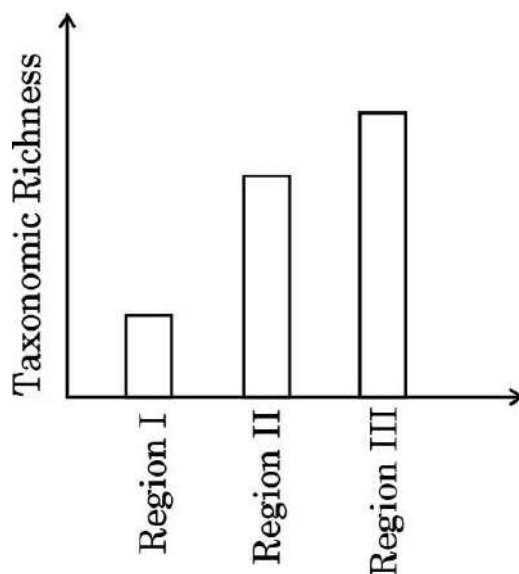
Questions No. 29 and 30 are case-based questions. Each question has 3 sub-questions with internal choice in one sub-question.

29. Read the following passage and answer the questions that follow.

4

Isn't it incredible that India's land area is only 2.4 per cent of the world's total land area whereas its share of the global species diversity is an impressive 8.1 per cent ! However, in these estimates of species, prokaryotes do not figure anywhere.

Biologists are always keen on collecting data with respect to species diversity observed in different regions of the world. The data collected based on the survey conducted for species richness of groups of mammals in three different regions of the world is shown in the bar graph given below :



- (a) Why is the species richness maximum in Region III in the bar graph ?

1

**OR**

- (a) Why is the species richness minimum in Region I in the bar graph ?
- (b) Plants and animals do not have uniform diversity in the world but show rather uneven distribution. Mention what this kind of diversity is referred to as.
- (c) Why is it that prokaryotes do not have an estimated number of their species diversity as seen in plants and animals ? Explain.

1

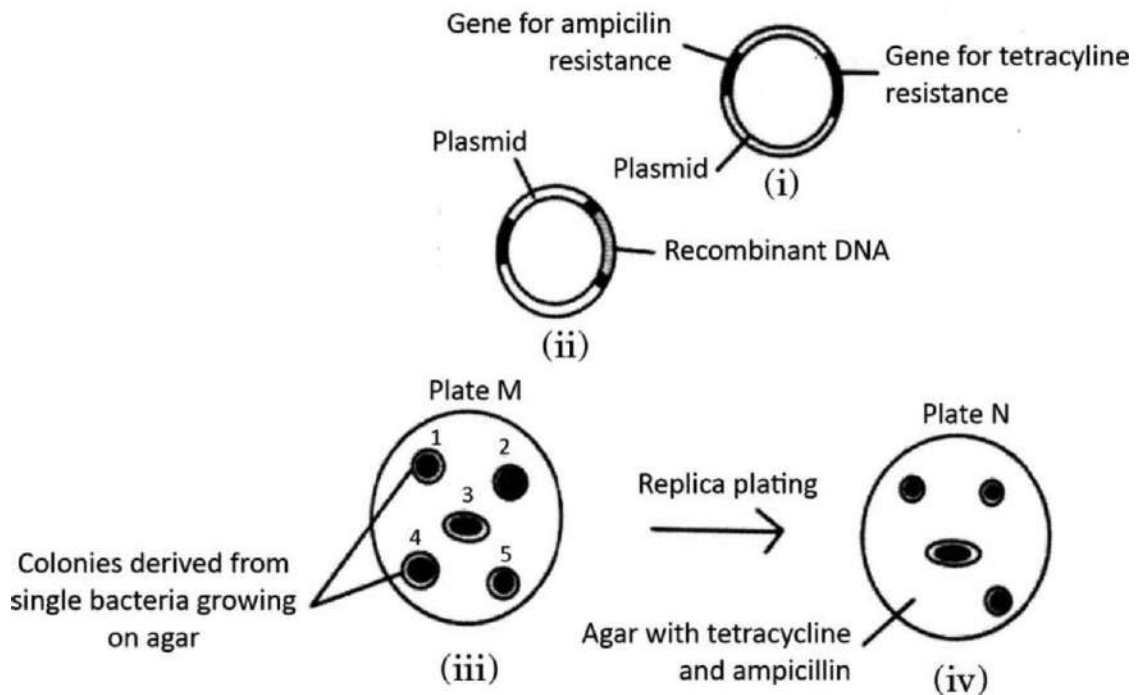
1

2

~~~~~

P.T.O.

30. Study the diagram given below that shows the steps involved in the procedure of selecting transformed bacteria and answer the questions that follow :



- (a) Identify the colony that has got transformed. Justify your answer. $\frac{1}{2} + \frac{1}{2}$
- (b) What are the sites in a plasmid called where ampicillin and tetracycline resistance genes are inserted ? State their role in genetic engineering. 2
- (c) Name two enzymes playing an important role in genetic engineering. 1

OR

- (c) State the role of β -galactosidase in insertional inactivation. 1

~~~~~

P.T.O.

## SECTION E

31. (a) (i) Explain the development of male gametophyte in an angiosperm.  $2\frac{1}{2}$
- (ii) Draw a labelled diagram of a three-celled male gametophyte.  $2\frac{1}{2}$

**OR**

- (b) (i) Draw a diagrammatic sectional view of ovary of human female and label the following :  $2$
- (1) Blood vessels
- (2) Primary follicle
- (3) Tertiary follicle
- (4) Ovum
- (ii) At which stage of life are primary follicles formed in a human female ?  $\frac{1}{2}$
- (iii) Explain the events (both hormonal and structural) that occur at the time of ovulation till the onset of the next menstrual cycle.  $2\frac{1}{2}$

32. (a) Stability, as one of the properties of genetic material, was very evident in one of the very early experiments in genetics. Name the scientist and describe his experiment. State the conclusion he arrived at.  $5$

**OR**

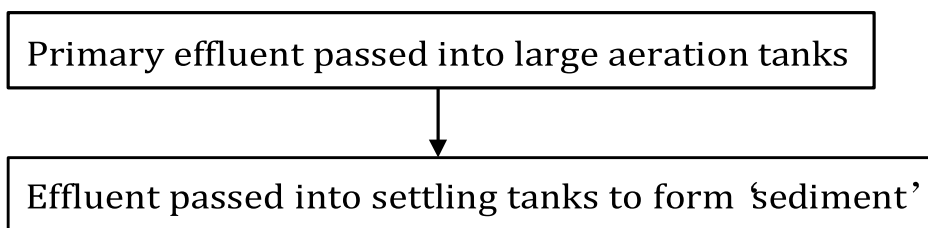
- (b) A tall pea plant bearing violet flowers with unknown genotype is given. Find the genotype by working out different crosses only by selfing the plants. Write the genotypic and phenotypic ratios of each cross shown by you.  $5$

33. (a) (i) Name and explain the property present in normal cells but is lost in cancer cells. 1  
2
- (ii) All normal human cells have genes that may become cancerous under certain conditions. Name them and explain how. 1
- (iii) State the role of the following techniques in detection and diagnosis of cancer :
- (1) Biopsy and Histopathology 1
- (2) Magnetic Resonance Imaging 1  
2

**OR**

- (b) Large quantities of sewage are generated every day in cities as well as in towns and are treated in Sewage Treatment Plants (STPs) to make them less polluting. Given below is the flow diagram of stages of STP.

Study the flow diagram and answer the questions that follow :



- (i) (1) Why is primary effluent passed into large aeration tanks ? 1
- (2) What is the 'sediment' formed, referred to as ? Mention its significance. 1
- (3) Explain the final step in the settling tank before the treated effluent is released into water bodies. 1
- (ii) Name any two organisms commonly used as biofertilisers, belonging to different kingdoms. Write how each one acts as a biofertiliser. 2

- *It is compulsory for all to prepare the Project file on **ANY ONE** of the following topics.*
  - *The Internal Assessment of Term II will be in the form of Project Portfolio/Project Report and Viva. Both Project and Viva will carry 5 Marks each.*
  - *The Project Report is needed to be completed in 1000 words in your own handwriting.*
- 

## **Project-Portfolio/ Project Report**

The Project-Portfolios is a compilation of the work that the students produce during the process of working on their ALS Project. The Project-Portfolio may include the following:

### **PROJECT FILE**

**Page 1 :** COVER PAGE, WITH TITLE OF PROJECT, SCHOOL DETAILS/DETAILS OF STUDENTS.

**Page 2 :** STATEMENT OF PURPOSE/OBJECTIVES/GOALS

**Page 3 :** CERTIFICATE OF COMPLETION UNDER THE GUIDANCE OF THE TEACHER.

**Page 4 :** ACTION PLAN FOR THE COMPLETION OF ASSIGNED TASKS.

**Mid Pages :** PROJECT/REPORT DETAILS( Graphics and pictures to be pasted on left hand side and content of the report to be written in your own handwriting on the right hand side of the page.

**Last Page :** LIST OF RESOURCES/BIBLIOGRAPHY

# PROJECT TOPICS (Do your project on ANY ONE of the following)

You have to make pictorial as well as graphical presentation on left hand side of the file. All data should be collected authentically and hand written essay of 1000 words on right side.

## TOPIC 1 - *The Last Lesson*

- Elaborate the theme of Linguistic Chauvinism and Procrastination and importance of Time Management.
- Collect data about countries where people have these tendencies.
- How do they give importance to their mother tongue?

## TOPIC 2 - *The Lost Spring*

- Collect data about various slums in our country and living conditions there. Also elaborate whether children have access of education there.
- How children are engaged in various kinds of work (Below 14)?
- Collect all information about biggest slums.

## TOPIC 3 - *Deep Water*

- Elaborate your any personal experience about any kind of fear haunted you yet.
- How did you overcome that fear?
- Collect data about types of fear people have in your locality and how they are trying to overcome it

## TOPIC 4 - *My Mother At Sixty-six*

- Explain the importance of parents in the family.
- On the context of the poem how do you love and care your mother?
- Collect data about condition of old age homes in our country, living condition there, number of old age homes.

## TOPIC 5 - *Keeping Quiet*

- Collect reasons of environmental degradation.
- How far is man harming the Earth?
- Focus on relevance of meditation and introspection.
- Theme of universal brotherhood and world peace in English poetry.

## TOPIC 6 - *Indigo*

- Collect all about different kinds of freedom movements of our country.
- What was the importance of Champaran Movement?
- You can write about autobiography of any freedom fighter.

## **TOPIC 7 - *The Third Level***

- Why 'hurry and worry' are trademarks of modern men?
- How far today life is insecure? Why do modern men want to escape?
- Interview your school principal or the counselor to know the problems (stress, fear, anxiety etc.) faced by the students in the virtual platform.
- Interview a physically challenged person and write about his views on the problems he faced due to his condition.
- What is the attitude of the society towards him?
- Collect data on the condition of rehabilitation centers in India and how people are living there?

**HOLIDAY HOMEWORK**  
**AUTUMN BREAK -2025**

CLASS-XII

SUB: MATHEMATICS

1. COMPELETE ALL THE WORKSHEETS ( Hard copy given)
2. SOLVE THE MT-IV QUESTION PAPER IN CLASS WORKCOPY
3. SOLVE THE PRACTICE QUESTION PAPER IN CLASS WORKCOPY

(Hard copy given on 20.09.2025)

4. MEMORISE THE DERIVATIVE AND INTEGRATION FORMULAES.

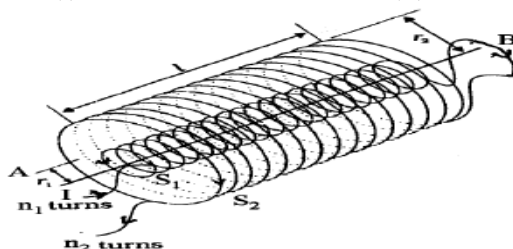
## HOLIDAY HOME WORK AUTUMN BREAK-25

### CLASS-XII

### SUB-PHYSICS

1. Define the term 'Mobility' of charge carriers in a conductor. Write its S.I. unit.
2. "For any charge configuration, equipotential surface through a point is normal to the electric field." Justify.
3. Show variation of resistivity of copper as a function of temperature in a graph.
4. Write the expression, in a vector form, for the Lorentz magnetic force  $\vec{F}$  due to a charge moving with velocity  $\vec{v}$  in a magnetic field  $\vec{B}$ . Write the direction of the magnetic force.
5. Name the parts of the electromagnetic spectrum which is
  - (a) suitable for radar systems used in aircraft navigation.
  - (b) used to treat muscular strain.
  - (c) used as a diagnostic tool in medicine.Write in brief, how these waves can be produced
6. A cell of emf ' $\mathcal{E}$ ' and internal resistance ' $r$ ' is connected across a variable load resistor  $R$ . Draw the plots of the terminal voltage  $V$  versus (i)  $R$  and (ii) the current  $I$ .
7. Two capacitors of unknown capacitances  $C_1$  and  $C_2$  are connected first in series and then in parallel across a battery of 100 V. If the energy stored in the two combinations is 0.045 J and 0.25 J respectively, determine the value of  $C_1$  and  $C_2$ . Also calculate the charge on each capacitor in parallel combination.
8. State the principle of working of a galvanometer.
9. An inductor  $L$  of inductance  $X_L$  is connected in series with a bulb  $B$  and an ac source. How would brightness of the bulb change when (i) number of turns in the inductor is reduced, (ii) an iron rod is inserted in the inductor and (iii) a capacitor of reactance  $X_C = X_L$  is inserted in series in the circuit. Justify your answer in each case.
10. State Ampere's circuital law, expressing it in the integral form.

Two long coaxial insulated solenoids,  $S_1$  and  $S_2$ , of equal lengths are wound one over the other as shown in the figure. A steady current ' $I$ ' flows through the inner solenoid  $S_1$ , to the other end B, which is connected to the outer solenoid  $S_2$ , through which the same current ' $I$ ' flows in the opposite direction so as to come out at end A. If  $n_1$  and  $n_2$  are the number of turns per unit length, find the magnitude and direction of the net magnetic field at a point (i) inside on the axis and (ii) outside the combined system.



11. (a) Define mutual inductance and write its S.I. units.



(b) Derive an expression for the mutual inductance of two long co-axial solenoids of same length wound one over the other.

(c) In an experiment, two coils  $c_1$  and  $c_2$  are placed close to each other. Find out the expression for the

emf induced in the coil  $c_1$  due to a change in the current through the coil  $c_2$ .

12. Derive lens maker's formula.

13. Write Huygen's principle. Using these principles prove 1) laws of reflection 2) laws of refraction

14. Define wave front. Show with diagram and condition formation of different types of wave fronts.

15. (a) Derive an expression for the impedance of a series LCR-circuit connected across an a.c. source.

(b) Draw a graph showing the variation of the current through the circuit with the frequency of ac source. (c) What is the impedance of this circuit at resonance?

16. State the laws of electromagnetic induction. An athlete peddles a stationary tricycle whose pedals are attached to a coil, having 100 turns each of area  $0.1 \text{ m}^2$ . The coil is lying in the X-Y plane, is rotated, in this plane, at the rate of 50 r.p.m., about the Y-axis, in a region where a uniform magnetic field,

$B = (0.01) \text{ K Tesla}$ , is present. Find the (i) maximum e.m.f. (ii) average e.m.f. generated in the coil over one complete revolution.

17. Define effective/r.m.s value of an alternating current. Obtain an expression for the effective/r.m.s current for an A.C represented by  $I = I_0 \sin \omega t$ .

18. Write a comparison between dia, para and ferro magnetic materials.

19. State the working of a.c. generator with the help of a labelled diagram.

The coil of an a.c. generator having  $N$  turns, each of area  $A$ , is rotated with a constant angular velocity  $\omega$ . Deduce the expression for the alternating e.m.f. generated in the coil.

20 i) Draw a labelled diagram of a step-down transformer. State the principle of its working.

(ii) Express the turns ratio in terms of voltages.

(iii) Find the ratio of primary and secondary currents in terms of turns ratio in an ideal transformer.

(iv) How much current is drawn by the primary of a transformer connected to 220 V supply when it delivers power to a 110 V— 550 W refrigerator

21. a) Derive the condition for the resonance to occur in LCR series circuit. In a series L-R circuit,  $L = 35 \text{ mH}$  and  $R = 11 \Omega$   $V_{\text{rms}} = 220 \text{ V}$ ,  $V = V_0 \sin \omega t$  and frequency 50 Hz are

applied. Find the current amplitude in the circuit and phase of current with respect to voltage. Draw reactance-frequency graph

22. Define light and write the conditions of sustained interference.

23. Obtain the resonant frequency  $\omega_r$  of a series *LCR* circuit with  $L = 2.0 \text{ H}$ ,  $C = 32 \mu\text{F}$  and  $R = 10 \Omega$ . What is the *Q*-value of this circuit?

**24 CASE STUDY.** Lens a piece of glass or other transparent substance that is used to form an image of an object by converging or diverging rays of light from the object. Because of the curvature of its surface, different rays of light are refracted through different angles. A convex lens causes rays to converge on a single point, the focal point. A concave lens causes rays to diverge as though they are coming from a focal point. Both types cause the rays to form a visual image of the object. The image may be real— inverted and photographable or visible on a screen—or it may be virtual—erect and visible only by looking through the lens. More often a number of lenses made of different materials are combined together as a compound lens to get lenses of desired power. . Compound lenses are used in such instruments as cameras, microscopes, telescopes and by magicians.

Based on the above facts answer the following questions

a) Which phenomena involved in the formation of image by a spherical lens 1

b) At which location of object in front of concave lens, the image between focus and optical centre is formed 1

c) Two lenses of focal lengths 20 cm and - 40cm are held in contact. If an object lies at infinity, calculate the image distance. 2

OR when a convex lens with refractive index 1.47 and immersed in a liquid of same focal length .what is the focal length of the lens inside the liquid.

**PM SHRI KENDRIYA VIDYALAYA**  
**KHURDA ROAD**

**XII CHEMISTRY AUTUMN BREAK HOMEWORK**

**TR. EKTA YADAV- PGT CHEMISTRY**

- Prepare a summary chart of the following (This chart should be handy and small in size) prepare it in such a way that it can be used for revision throughout the year
  - A) Important formulas of Chemical Kinetics, Haloalkanes and Haloarenes, Alcohols Phenols Ethers.
  - B) All the distinguishing tests. (First two chapters of Organic Chemistry )
  - C) All the name reactions. (first two chapters of Organic Chemistry )

Answer the following questions:

**1. Solutions**

1. A 5% solution of cane sugar (molar mass =  $342 \text{ g mol}^{-1}$ ) is prepared in water. Calculate the molarity of this solution.

2. Why is  $\text{CaCl}_2$  used to clear snow on roads in cold climates? (Application of depression in freezing point).

**2. Electrochemistry**

1. Why does the rusting of iron increase in the presence of salt in water? (Electrochemical explanation).

2. A cell is Constructed with  $\text{Zn}/\text{Zn}^{2+}(0.1\text{M}) \parallel \text{Cu}^{2+}(1\text{M})/\text{Cu}$ . Calculate its EMF at 298 K. (Competency-based calculation using Nernst equation).

**3. Chemical Kinetics**

1. The decomposition of  $\text{N}_2\text{O}_5$  is first order. If its half-life is 200 s, calculate the rate constant.

2. Why does food get spoiled faster in summer than in winter? (Application of Arrhenius equation and temperature dependence of rate).

#### **4. D-Block Elements**

1. Why are transition metal compounds often used as catalysts? (Application in industries like Haber's process).

2. Explain why  $\text{Cr}^{2+}$  is a strong reducing agent whereas  $\text{Mn}^{3+}$  is an oxidizing agent.

#### **5. F-Block Elements**

1. Why is  $\text{Eu}^{2+}$  more stable than  $\text{Ce}^{2+}$ ? (Application of electronic configuration & stability).

2. Lanthanide compounds are used in making colourful TV screens & phosphors – explain with reason.

#### **6. Coordination Compounds**

1.  $[\text{Ni}(\text{CO})_4]$  is diamagnetic whereas  $[\text{NiCl}_4]^{2-}$  is paramagnetic. Explain using CFT.

2. Write the application of EDTA in complexometric titrations for hardness of water.

#### **7. Haloalkanes and Haloarenes**

1. Why is chloroform stored in dark brown bottles? (Competency: prevents formation of poisonous phosgene).

2. Why do haloarenes undergo electrophilic substitution more easily but are resistant to nucleophilic substitution?

## 8. Alcohols, Phenols and Ethers

1. Ethanol is used as an antidote for methanol poisoning. Explain the chemistry behind it.

2. Why is phenol more reactive towards electrophilic substitution than benzene?



केन्द्रीय विद्यालय संगठन

**PM SHRI KENDRIYA VIDYALAYA KHURDA ROAD**  
**Holiday Home Work for Class 12 Computer Science**

**Table: STUDENT**

| RollNo | Name   | Class | Marks | City        | DOB        |
|--------|--------|-------|-------|-------------|------------|
| 101    | Ananya | 12A   | 92    | Bhubaneswar | 2007-05-16 |
| 102    | Ravi   | 12A   | 67    | Cuttack     | 2007-09-21 |
| 103    | Sneha  | 12B   | 81    | Khurda      | 2006-11-03 |
| 104    | Arjun  | 12C   | 55    | Bhubaneswar | 2007-12-12 |
| 105    | Priya  | 12B   | 74    | Puri        | 2007-08-02 |

Write SQL queries for the STUDENT table:

1. Display all details of students who have Marks \*greater than 80\*.
2. Show Name and City of students whose Class is \*'12B'\* \*or\* Marks are \*less than 60\*.
3. List RollNo and Name of students \*not\* from city "Bhubaneswar".
4. Display names of students with Marks \*between 60 and 90\*.
5. Show all records where Name \*starts with 'A'\*.
6. List students whose City is either \*'Khurda' or 'Puri'\*.
7. Display Name and Marks of students who are in Class '12A' \*and\* Marks > 70.
8. Show names of students whose Name \*ends with 'a'\*.
9. Display RollNo, Name and Class of students who do \*not\* have Marks equal to 74.
10. List all students born \*after '2007-01-01'\*.

## Holiday Home Work for Class 12 Informatics Practices

Write SQL queries for the STUDENT table:

**Table: STUDENT**

| RollNo | Name   | Class | Marks | City        | DOB        |
|--------|--------|-------|-------|-------------|------------|
| 101    | Ananya | 12A   | 92    | Bhubaneswar | 2007-05-16 |
| 102    | Ravi   | 12A   | 67    | Cuttack     | 2007-09-21 |
| 103    | Sneha  | 12B   | 81    | Khurda      | 2006-11-03 |
| 104    | Arjun  | 12C   | 55    | Bhubaneswar | 2007-12-12 |
| 105    | Priya  | 12B   | 74    | Puri        | 2007-08-02 |

1. Find the Name and Marks of students where City = 'Cuttack' \*and\* Marks > 60.
2. Display records of students whose Name contains the letter \*'n'\* anywhere.
3. Show RollNo and Name of students where Class = '12A' \*or\* City = 'Puri'.
4. Display students whose Marks are \*not between 50 and 80\*.
5. List Name and City of students who have City \*like 'Bhu%'\*.
6. Show all details of students whose Name has \*second letter 'r'\* (use \_ wildcard).
7. Display names of students from City 'Khurda' \*and\* born before '2007-12-31'.
8. Show Name and Marks of students whose Marks are \*greater than or equal to 70\* and City is \*not 'Cuttack'\*.
9. List RollNo and Name of students whose Name \*ends with 'i'\*.
10. Show all students whose City is \*either 'Bhubaneswar' or 'Khurda'\* and Marks > 65.

## PM SHREE KV KHURDA ROAD

### HOLIDAY HOMEWORK FOR AUTUMN BREAK-2025-26

#### CLASS XII

#### SUBJECT: ECONOMICS

| Q.N. | QUESTION                                                                                                                                                                | Marks |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 1    | Explain the concept of Domestic Territory in the context of National Income and Related Aggregates.                                                                     | 4     |
| 2    | Explain the concept of Normal Residents in the context of National Income and Related Aggregates.                                                                       | 4     |
| 3    | Differentiate between Producer Goods and Consumer Goods with suitable examples.                                                                                         | 4     |
| 4    | State the main functions of money.                                                                                                                                      | 4     |
| 5    | How the central bank controls credit? State any three credit control measures.                                                                                          | 4     |
| 6    | Explain the method of value added to estimate National Income. The steps and precautions to be elaborated.                                                              | 6     |
| 7    | Explain the main features of Demonetization and GST as implemented by the Government of India.                                                                          | 6     |
| 8    | "Rural Development has been lacking till date in our economy." Do you agree with this statement? If yes then explain with reason. If not then also explain with reason. | 6     |
| 9    | "Human capital, Human development and Economic Development are related with each other." Explain.                                                                       | 6     |
| 10   | Explain the components of expenditure method in the estimation of national income. Elaborate each component.                                                            | 6     |

**Note:** 1. The questions of 4 marks to be written in 80 words and questions of 6 marks to be written in 120 words each.

2. The holiday homework to be written Economics notebook. No separate copy to be prepared.